SECOND SUPPLEMENTAL AMENDMENT UNDER 37 C.F.R. § 1.111

In the Sequence Listing:

Please replace the paper copy of the previously submitted sequence listing with the paper copy of the substitute sequence listing submitted herewith. A computer readable form copy of the substitute sequence listing accompanies this submission.

In the Specification:

Please replace the paragraph beginning at page 3, line 28 with the following rewritten paragraph:

--The present invention relates to a method for detecting wPTH in a biological sample without detecting the non (1-84) large PTH fragment component of I-PTH, and in particular to a substantially pure monoclonal or polyclonal antibody or antibody fragment specific for the initial sequence for wPTH which comprises a domain for adenylate cyclase activation, VAL-SER-GLU-ILE-GLN-LEU-MET (SEQ ID NO. 3), wherein at least four amino acids in this sequence are part of the antibody reactive portion of the peptide. The method for measuring the amount of wPTH in a sample such as serum, plasma, or blood comprises four general steps which can vary depending upon whether one uses a first antibody or antibody fragment specific for the PTH peptide VAL-SER-GLU-ILE-GLN-LEU-MET (SEQ ID NO. 3), wherein at least four amino acids are part of the antibody reactive portion of the peptide either as a signal antibody or a capture antibody in conventional immunoassay formats. Used either as a signal antibody or as a capture antibody, enough antibody is added to bind all w-PTH present. Next, one allows the first antibody to bind to any wPTH present, thereby forming a complex. A specific binding label comprised of a second antibody and a conventional immunoassay label, such as chemiluminescent agents, colorimetric agents, energy transfer agents, enzymes, fluorescent

agents, and radioisotopes, is used to label the complex, preferably at the N-terminal end of wPTH, and can be added either substantially simultaneously with the first antibody or subsequent thereto. Finally, one uses conventional techniques to measure the amount of labeled complex, and thereby calculate wPTH levels in the sample. If used as a signal antibody, then the first.--

Please replace the paragraph, beginning at page 5, line 14 with the following rewritten paragraph:

FIGURES ~~6A and 6B~~ 5 are diagrammatic views showing binding of whole (1-84) PTH compared with interference from non (1-84) PTH fragments (e.g., (7-84) PTH (SEQ ID NO:6)) in conventional I-PTH assays.

Please replace the paragraph, beginning at page 7, line 26 with the following rewritten paragraph:

--In order to make the signal antibody in the above assay, first one makes a synthetic PTH peptide corresponding either to hPTH (Ser - Val - Ser - Glu - Ile - Gln - Leu - Met), SEQ ID NO:4 , rat PTH (Ala -Val - Ser - Glu - Ile - Gln - Leu - Met), SEQ ID NO:5, or at least four amino acids in the common sequence, absent the first amino acid. The selected peptide can play two roles in making an assay, first as a specific antigenic source for creating a polyclonal antibody or monoclonal antibody source for signal antibody or capture antibody, and second as part of an affinity purification means for isolating the desired signal antibody or capture antibody.--